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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/649,092	08/28/2000	Masato Karaiwa	HIR-115	7797

7590 02/26/2002

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EXAMINER
JACKSON, MONIQUE R

ART UNIT	PAPER NUMBER
1773	3

DATE MAILED: 02/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

T-D-3

Office Action Summary	Application No.	Applicant(s)	
	09/649,092	KARAIWA, MASATO	
	Examiner	Art Unit	
	Monique R Jackson	1773	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-6 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-6 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim1 recites the limitation:

"wherein a polyolefinic thermoplastic elastomer (B) containing an oily softening agent is laminated on **the surface layer** comprising a polyolefinic thermoplastic elastomer (A) containing an oily softening agent, the ratio (a) of the oily softening agent to **the amorphous component (or the total of the amorphous component and polyethylene if incorporated)** in said thermoplastic elastomer (A) and the ratio (b) of the oily softening agent **to the amorphous component (or to the total of the amorphous component and polyethylene if polyethylene is incorporated)** in said thermoplastic elastomer (B) satisfy the following requisites;

ratio (a) $\geq$ ratio (b),

ratio(a) = 5 to 200 wt.%, and

ratio(b) = 5 to 200wt.%"

wherein the claim limitation is unclear for the following reasons:

a. At line 4, the claim recites "the surface layer", however given that there is insufficient antecedent basis for this term in the claims, it is unclear whether elastomer (B) is laminated to the surface layer of elastomer (A) or whether elastomer (A) is the surface layer of the laminated material.

b. At lines 6-7 and again at lines 10-11, the claim recites the limitation "the amorphous component", however given that there is insufficient antecedent basis for this term in the claims and given that the specification does not clearly define the term, it is unclear what is meant to be encompassed by the term, "the amorphous component". The Examiner notes that the specification at Page 18, lines 14-23, recites that the term "amorphous component...indicates the total quantity of the ethylene-α-olefin-non-conjugated polyene copolymer rubber (Y), ...and the oily softening agent (Z)" and that when a "hydrocarbon type rubbery material that is not crosslinked with peroxide, such as polyisobutylene, butyl rubber and propylene-ethylene copolymer, the amorphous component indicates the total quantity obtained by adding these amounts." However, it appears that the data presented in the tables do not incorporate the polypropylene component in terms of these ratios though polypropylene is similar to propylene-ethylene which is listed by the Applicant as an example of a "hydrocarbon type rubbery material".

c. At lines 6-8 and 10-11, the claim includes parenthetic expressions which render the claim indefinite for it is unclear whether the limitation presented in the parenthesis is part of the claimed invention.

d. At lines 15-16, the claim recites that the ratios (a) and (b) equal "5 to 200 wt.%" however these limitations are unclear given that the ratios (a) and (b) are ratios with respect to the oily softening agent to the amorphous component in elastomer (A) and (B), respectively, and hence should be expressed in terms of a value or amount of oily softening agent to a value or amount of amorphous component, ie. 5 to 200wt% oily softening agent based on 100wt% amorphous component, etc. The limitations are further unclear given that the specification

discloses examples expressed in terms of softening agent concentrations ranging from 20-41wt% wherein the amount of the softening agent is part of the overall amount of amorphous component, and hence the ratios (a) and (b) could not exceed 100%.

e. Claim 2 also recites similar limitations in terms of the ratios(a') and (b') which are unclear for similar reasons as discussed in item d above.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Mori et al (USPN 5,766,703) based on the assumption that ratio(a) and (b) are actually weight percentages based on the total weight content of the oily, elastomer, and polyolefin components and that either elastomer composition (A) or (B) may comprise the surface layer of the laminated material. Mori et al teach an automobile weather strip (*molding*) or glass run channel formed by coextruding a main body made of a sulfur-vulcanizable ethylene propylene rubber (EPDM) type compound (*polyolefinic thermoplastic elastomer*) and a sealer underlying layer comprising a EPDM type compound blended with unsaturated nitrile-conjugated diene copolymer rubber NBR and hydrogenated styrene-conjugated diene copolymer rubber SBR polymer, wherein both coextruded layers may compounded with auxiliary materials such as reinforcing fillers and lubricants (*oily softening agents*) with disclosed examples utilizing paraffinic/process oil within

the instantly claimed weight percentage and also compound polyethylene into the rubber composition as instantly claimed (Col. 1, line 14 – Col. 3, line 30; Examples; Tables 1-10.)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mori et al (USPN 5,766,703.) The teachings of Mori et al are discussed above. Though Mori et al do not specifically limit the amount of lubricants (*oily softening agent*) in the coextruded layers as instantly claimed, it would have been obvious to one having ordinary skill in the art to utilize routine experimentation to determine the optimum amount of lubricants or additives to compound into the rubber materials to provide the desired lubricating or additive property for a particular end use given that the amount is a result-effective property based on the property of the respective additive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

mrj
February 22, 2002

Paul Thibodeau
Supervisory Patent Examiner
Technology Center 1700